

API No. <u>42-003-46580</u> Drilling Permit # <u>790854</u> SWR Exception Case/Docket No. _____	RAILROAD COMMISSION OF TEXAS OIL & GAS DIVISION APPLICATION FOR PERMIT TO DRILL, RECOMPLETE, OR RE-ENTER <small>This facsimile W-1 was generated electronically from data submitted to the RRC. A certification of the automated data is available in the RRC's Austin office.</small>	FORM W-1 07/2004 Permit Status: Approved
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1. RRC Operator No. 630591	2. Operator's Name (as shown on form P-5, Organization Report) OXY USA INC.	3. Operator Address (include street, city, state, zip): ATTN PROD RPTNG SUPV P O BOX 50250 MIDLAND, TX 79710-0000
4. Lease Name ST ANDREWS UNIT		5. Well No. 320LH

GENERAL INFORMATION					
6. Purpose of filing (mark ALL appropriate boxes):					
<input checked="" type="checkbox"/> New Drill		<input type="checkbox"/> Recompletion		<input type="checkbox"/> Reclass	
<input checked="" type="checkbox"/> Amended		<input type="checkbox"/> Amended as Drilled (BHL) (Also File Form W-1D)		<input type="checkbox"/> Field Transfer	
<input type="checkbox"/> Vertical		<input checked="" type="checkbox"/> Horizontal (Also File Form W-1H)		<input type="checkbox"/> Directional (Also File Form W-1D)	
<input type="checkbox"/> Sidetrack					
7. Wellbore Profile (mark ALL appropriate boxes):					
8. Total Depth 12500		9. Do you have the right to develop the minerals under any right-of-way? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		10. Is this well subject to Statewide Rule 36 (hydrogen sulfide area)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

SURFACE LOCATION AND ACREAGE INFORMATION					
11. RRC District No. 08		12. County ANDREWS		13. Surface Location <input checked="" type="checkbox"/> Land <input type="checkbox"/> Bay/Estuary <input type="checkbox"/> Inland Waterway <input type="checkbox"/> Offshore	
14. This well is to be located <u>7.5</u> miles in a <u>NE</u> direction from <u>ANDREWS CITY</u> which is the nearest town in the county of the well site.					
15. Section 3		16. Block 3		17. Survey UL	
18. Abstract No. A-U50		19. Distance to nearest lease line: 100 ft.		20. Number of contiguous acres in lease, pooled unit, or unitized tract: 6089.93	
21. Lease Perpendiculars: <u>7783</u> ft from the <u>NORTH</u> line and <u>1290</u> ft from the <u>WEST</u> line.					
22. Survey Perpendiculars: <u>2500</u> ft from the <u>NORTH</u> line and <u>1290</u> ft from the <u>WEST</u> line.					
23. Is this a pooled unit? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		24. Unitization Docket No:		25. Are you applying for Substandard Acreage Field? <input type="checkbox"/> Yes (attach Form W-1A) <input checked="" type="checkbox"/> No	

FIELD INFORMATION List all fields of anticipated completion including Wildcat. List one zone per line.						
26. RRC District No.	27. Field No.	28. Field Name (exactly as shown in RRC records)	29. Well Type	30. Completion Depth	31. Distance to Nearest Well in this Reservoir	32. Number of Wells on this lease in this Reservoir
08	79735500	SAINT WILMA (STRAWN)	Oil Well	9000	299.00	130

BOTTOMHOLE LOCATION INFORMATION is required for DIRECTIONAL, HORIZONTAL, AND AMENDED AS DRILLED PERMIT APPLICATIONS (see W-1H attachment)	
Remarks See W1 Comments attached	<u>Certificate:</u> I certify that information stated in this application is true and complete, to the best of my knowledge. <u>Tony Shumsky, Sr. Analyst</u> <u>Sep 04, 2014</u> Name of filer Date submitted <u>(713)985-6991, x6991</u> <u>Tony_Shumsky@oxy.com</u> Phone E-mail Address (OPTIONAL)
RRC Use Only Data Validation Time Stamp: Oct 1, 2014 10:03 AM(Current Version)	

**RAILROAD COMMISSION OF TEXAS
OIL & GAS DIVISION**

Form W-1H 07/2004
Supplemental Horizontal Well Information

Permit Status: **Approved**

The RRC has not approved this application. Duplication or distribution of information is at the user's own risk.

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Permit # **790854**
Approved Date: **Sep 24, 2014**

1. RRC Operator No. 630591	2. Operator's Name (exactly as shown on form P-5, Organization Report) OXY USA INC.	3. Lease Name ST ANDREWS UNIT	4. Well No. 320LH
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Lateral Drainhole Location Information

5. Field as shown on Form W-1 **SAINT WILMA (STRAWN) (Field # 79735500, RRC District 08)**

6. Section 39	7. Block 4	8. Survey UL	9. Abstract	10. County of BHL ANDREWS
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11. Terminus Lease Line Perpendiculars 10 ft. from the NORTH line. and 1290 ft. from the WEST line
12. Terminus Survey Line Perpendiculars 10 ft. from the NORTH line. and 1290 ft. from the WEST line
13. Penetration Point Lease Line Perpendiculars 7783 ft. from the NORTH line. and 1290 ft. from the WEST line

Permit Status: **Approved**

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**RAILROAD COMMISSION OF TEXAS
OIL & GAS DIVISION**

APPLICATION FOR PERMIT TO DRILL, RECOMPLETE, OR RE-ENTER

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W-1 Comments

Permit # **790854**
Approved Date: **Sep 24, 2014**

[RRC STAFF Sep 4, 2014 2:25 PM]: Per Susan Rudolph in Public Sales, this permit has been expedited.; [RRC STAFF Sep 9, 2014 4:01 PM]: There have been problems identified with this permit (see problem letter attachment). Notification sent.; [RRC STAFF Sep 10, 2014 11:28 AM]: Problems identified with this permit are resolved.; [RRC STAFF Sep 10, 2014 11:31 AM]: Per Amanda Maxian: "I submitted the original W1 that was approved, but we moved the EOT for this well. Someone else submitted the amended W1 while I was out last week, and I'm not exactly sure what happened. There should not be any waivers or SWR 37 required, as we have filed a P6 to consolidate the leases that this wellbore traverses and our LTP is 100; from LL as allowed by St Wilma (Strawn) field rules. This is also not a PSA well.

Attached are the before and after plats for the pooling/consolidation. I think that that signed P-12 forms were already attached to W1, but here they are again if it makes it easier to delete all attachments and start fresh."; [RRC STAFF Sep 24, 2014 10:16 AM]: Changed BHL survey information to match RRC GIS.

**RAILROAD COMMISSION OF TEXAS
OIL & GAS DIVISION**

PERMIT TO DRILL, DEEPEN, PLUG BACK, OR RE-ENTER ON A REGULAR OR ADMINISTRATIVE EXCEPTION LOCATION

PERMIT NUMBER 790854	DATE PERMIT ISSUED OR AMENDED (AMENDED) Sep 24, 2014	DISTRICT * 08		
API NUMBER 42-003-46580	FORM W-1 RECEIVED Sep 04, 2014	COUNTY ANDREWS		
TYPE OF OPERATION NEW DRILL	WELLBORE PROFILE(S) Horizontal	ACRES 6089.93		
OPERATOR OXY USA INC. ATTN PROD RPTNG SUPV P O BOX 50250 MIDLAND, TX 79710-0000		630591 NOTICE This permit and any allowable assigned may be revoked if payment for fee(s) submitted to the Commission is not honored. District Office Telephone No: (432) 684-5581		
LEASE NAME ST ANDREWS UNIT		WELL NUMBER 320LH		
LOCATION 7.5 miles NE direction from ANDREWS CITY		TOTAL DEPTH 12500		
Section, Block and/or Survey SECTION ◀ 3 BLOCK ◀ 3 ABSTRACT ◀ U50 SURVEY ◀ UL				
DISTANCE TO SURVEY LINES 2500 ft. NORTH 1290 ft. WEST		DISTANCE TO NEAREST LEASE LINE 100 ft.		
DISTANCE TO LEASE LINES 7783 ft. NORTH 1290 ft. WEST		DISTANCE TO NEAREST WELL ON LEASE See FIELD(s) Below		
FIELD(s) and LIMITATIONS: <p style="text-align: center;">* SEE FIELD DISTRICT FOR REPORTING PURPOSES *</p>				
FIELD NAME LEASE NAME	ACRES NEAREST LEASE	DEPTH NEAREST LEASE	WELL # NEAREST WE	DIST
----- SAINT WILMA (STRAWN) ST ANDREWS UNIT -----	6089.93 100	9,000	320LH 299	08
----- WELLBORE PROFILE(s) FOR FIELD: Horizontal -----				
RESTRICTIONS: Lateral: TH1 Penetration Point Location Lease Lines: 7783.0 F NORTH L 1290.0 F WEST L Terminus Location BH County: ANDREWS Section: 39 Block: 4 Abstract: Survey: UL Lease Lines: 10.0 F NORTH L 1290.0 F WEST L Survey Lines: 10.0 F NORTH L 1290.0 F WEST L				
THE FOLLOWING RESTRICTIONS APPLY TO ALL FIELDS				
This well shall be completed and produced in compliance with applicable special field or statewide spacing and density rules. If this well is to be used for brine mining, underground storage of liquid hydrocarbons in salt formations, or underground storage of gas in salt formations, a permit for that specific purpose must be obtained from Environmental Services prior to construction, including drilling, of the well in accordance with Statewide Rules 81, 95, and 97.				

RAILROAD COMMISSION OF TEXAS
OIL & GAS DIVISION
SWR #13 Formation Data

ANDREWS (003) County

Formation	Shallow Top	Deep Top	Remarks	Geological Order	Effective Date
YATES	2,500	3,200		1	12/17/2013
SEVEN RIVERS	3,000	3,000		2	12/17/2013
QUEEN	3,600	4,800		3	12/17/2013
GRAYBURG	3,100	5,000		4	12/17/2013
SAN ANDRES	3,700	5,300	CO2 flood, high flows, H2S, corrosive	5	12/17/2013
HOLT	5,000	5,500		6	12/17/2013
GLORIETA	5,100	6,000		7	12/17/2013
TUBB	6,100	6,300		8	12/17/2013
CLEARFORK	5,600	7,600		9	12/17/2013
PERMIAN DETRITAL	7,800	7,900		10	12/17/2013
LEON	7,900	7,900		11	12/17/2013
WICHITA ALBANY	6,500	8,100		12	12/17/2013
SPRABERRY	7,300	8,600		13	12/17/2013
DEAN	9,200	9,500		14	12/17/2013
WOLFCAMP	7,500	9,900		15	12/17/2013
CANYON	8,600	10,200		16	12/17/2013
PENNSYLVANIAN	8,700	10,200		17	12/17/2013
MCKEE	8,300	10,600		18	12/17/2013
STRAWN	8,800	11,000		19	12/17/2013
FUSSELMAN	8,400	11,900		20	12/17/2013
DEVONIAN	7,600	12,500		21	12/17/2013
SILURIAN	8,000	12,500		22	12/17/2013
ELLENBURGER	7,900	13,900		23	12/17/2013

The above list may not be all inclusive, and may also include formations that do not intersect all wellbores. Formation "TOP" information listed reflects an estimated range based on geologic variances across the county. To clarify, the "Deep Top" is not the bottom of the formation; it is the deepest depth at which the "TOP" of the formation has been or might be encountered. This is a dynamic list subject to updates and revisions. It is the operator's responsibility to make sure that at the time of spudding the well the most current list is being referenced. Refer to the RRC website at the following address for the most recent information.
<http://www.rrc.state.tx.us/oil-gas/compliance-enforcement/rule-13-geologic-formation-info>



Texas Commission
on Environmental Quality
Surface Casing Program

DEPTH OF USABLE-QUALITY GROUND WATER TO BE PROTECTED

Date September 30, 2010

TCEQ File No.: SC- 13843

***** EXPEDITED APPLICATION *****

API Number 00300000

Attention: MIGUEL GRELLA

RRC Lease No. 000000

SC_256791_00300000_000000_13843.pdf

EXL PETROLEUM LP
6 DESTA DR
STE 2800
MIDLAND TX 79705

--Measured--

990 ft FWL

1650 ft FSL

MRL: SURVEY

Digital Map Location:	
X-coord/Long	<u>102.43156</u>
Y-coord/Lat	<u>32.37791</u>
Datum	<u>27</u> Zone <u></u>

P-5# 256791

County ANDREWS

Lease & Well No. UNIVERSITYLEAH #3&ALL

Purpose ND

Location SUR-UL, BLK-3, SEC-3, -- [TD=11500], [RRC 8],

To protect usable-quality ground water at this location, the Texas Commission on Environmental Quality recommends:


The interval from the land surface to a depth of 250 feet and the ZONE from 1300 feet to 1700 feet must be protected.

This recommendation is applicable to all wells drilled in this section 3.

Note: Unless stated otherwise, this recommendation is intended to apply only to the subject well and not for area-wide use. Approval of the well completion methods for protection of this groundwater falls under the jurisdiction of the Railroad Commission of Texas. This recommendation is intended for normal drilling, production, and plugging operations only. It does not apply to saltwater disposal operation into a nonproductive zone (RRC Form W-14).

If you have any questions, please contact us at 512-239-0515, sc@tceq.state.tx.us, or by mail MC-151.

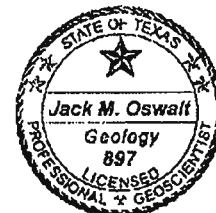
Sincerely,


Digitally signed by Jack Oswalt
DN: cn=US, st=Texas, ln=Austin, ou=Surface Casing, o=Texas Commission on Environmental Quality, cn=Jack Oswalt, email=joswalt@tceq.state.tx.us
Date: 2010.09.30 10:00:53 -05'00'

Jack M. Oswalt, P.G.

Geologist, Surface Casing Team
Waste Permits Division

GEOLOGIST SEAL



The seal appearing on this document was authorized by Jack M. Oswalt on 9/30/2010
Note: Alteration of this electronic document will invalidate the digital signature.

Devon Energy Production Co., L.P.
ULS 4-33 LEASE

Wind River Energy, Inc.
UNIVERSITY
LAND SURVEY
BLOCK 4

3435
3938

33

COG OPERATING

Tandem Energy Corporation
UNIVERSITY40A LEASE

OXY USA INC.
ST. ANDREWS UNIT

404

COG OPERATING

UNIVERSITY
LAND SURVEY
BLOCK 3

32

Surface to Penetration Point
Grid Bearing - N12°29'05"E -- 0'
Penetration Point to First Take Point
Grid Bearing - N12°29'05"E -- 0'
First Take Point to Last Take Point
Grid Bearing - N12°29'05"E -- 7683'
Last Take Point to End of Terminus
Grid Bearing - N12°29'05"E -- 90'

REVISED NEW DRILL
SURFACE LOCATION WELL NO. 320LH
2500' FNL x 1290' FWL Section 3, Block 3
University Land Survey,
ANDREWS CO., TX. WELL DATA - NAD 27, TX(NC)
X = 478268.39'; Y = 295460.92'
Lat. = 32°22'50.24"; Long. = 102°25'51.68"
Ground Elevation: 3079.1'
Approx. 7.5 miles Northeast of Andrews City, TX

PENETRATION POINT WELL NO. 320LH
2500' FNL x 1290' FWL Section 3, Block 3
University Land Survey,
ANDREWS CO., TX. WELL DATA - NAD 27, TX(NC)
X = 478268.39'; Y = 295460.92'
Lat. = 32°22'50.24"; Long. = 102°25'51.68"

FIRST TAKE POINT WELL NO. 320LH
2500' FNL x 1290' FWL Section 3, Block 3
University Land Survey,
ANDREWS CO., TX. WELL DATA - NAD 27, TX(NC)
X = 478268.39'; Y = 295460.92'
Lat. = 32°22'50.24"; Long. = 102°25'51.68"

LAST TAKE POINT WELL NO. 320LH
100' FNL x 1290' FWL Section 39, Block 4
University Land Survey,
ANDREWS CO., TX. WELL DATA - NAD 27, TX(NC)
X = 476607.45'; Y = 302962.35'
Lat. = 32°24'03.62"; Long. = 102°26'15.14"

END OF TERMINUS WELL NO. 320LH
10' FNL x 1290' FWL Section 39, Block 4
University Land Survey,
ANDREWS CO., TX. WELL DATA - NAD 27, TX(NC)
X = 476587.99'; Y = 303050.22'
Lat. = 32°24'04.48"; Long. = 102°26'15.41"

Clayton Williams Energy, Inc.

UNIVERSITY / WAFWA ST. ANDREWS UNIT 320LH	
NAD 83 LAT (DD)	NAD 83 LONG (DD)
32.3807262	-102.4314581

UNIT ACREAGE = 6089.93 ± AC.
SAINT WILMA (STRAWN) FIELD
UNIT BOUNDARY - - - - -
PRODUCING WELL - - - - - ●
INJECTION WELL - - - - - ●
WELL LOCATIONS - - - - - ○
PROPOSED CONVERSION - - - - - ○_{PC}

GRID
NAD27 TNCZ
I, DENNIS W. HUGHES hereby certify that this plat,
drawn to the scale indicated, accurately represents
conditions as they actually exist on the property
on which permit to drill is sought and correctly
reflects all pertinent data required to be shown on
such plat by orders of the Railroad Commission of Texas.
Dennis W. Hughes
Date: 9/3/2014

OXY USA INC.

Partial Unit Plat

ST. ANDREWS UNIT

Well No. 320LH

Andrews County, Texas

Scale: 1" = 1000' 9-3-2014 359_st_andrews_unit.DGN
Plat prepared by MAL
Horizon Survey, Inc.